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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|--|----------------------|-------------------------|------------------|
| 10/588,398 | 08/03/2006 | Samuel Bron | 0-06-172 (17660/US/CIP) | 8382 |
| 42009 KEVIN D. MCC | 7590 08/07/200 CARTHY | EXAMINER | | |
| | VN MCCARTHY & G | WINKLER, MELISSA A | | |
| := | 424 MAIN STREET 1920 LIBERTY BUILDING | | ART UNIT | PAPER NUMBER |
| BUFFALO, NY 14202 | | | 1796 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 08/07/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|---|--|--|--|--|
| | 10/588,398 | BRON ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | MELISSA WINKLER | 1796 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| | / IC CET TO EVOIDE AMONTH! | C) OD TUUDTY (20) DAVC | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | lely filed the mailing date of this communication. (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on <u>03 Au</u> | iaust 2006 | | | | | |
| • | action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| closed in accordance with the practice under E | | | | | | |
| Disposition of Claims | | | | | | |
| • 4)⊠ Claim(s) <u>1-26</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6) Claim(s) <u>1-26</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a)⊠ All b)⊡ Some * c)⊡ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | _ | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date | | | | | | |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Informal Patent Application | | | | | | |
| Paper No(s)/Mail Date <u>7/26/07</u> . 6) Other: | | | | | | |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 7, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,338,478 to Barry et al. in view of US 4,525,420 to Imai et al.

Regarding Claims 1 – 7, 12, and 13. Barry et al. teach a stabilizer composition for preventing scorching in polyurethane foams containing flame retardants (Column 1, Lines 51 - 61; Column 4, Line 64 - Column 5, Line 3). A mixture of two types of antioxidant agents, a diarylamine and a hindered phenol, is used in the composition (Column 1, Lines 51 - 61). The diarylamine used may also be a mixture of alkylated diphenylamines (Column 2, Lines 10 - 26). The stabilizer composition further comprises a pentaerythritol phosphite such as bis(2,4-di-*t*-butylphenyl)pentaerythritol diphosphite (Column 1, Lines 51 - 61; Column 2, Line 59 - Column 3, Line 9). The stabilizer composition may be added to a polyurethane foam-forming reaction mixture which may further comprise stannous octoate, a metallic salt of carboxylic acid (Column 3, Lines 46 - 63 and Column 4, Lines 39 - 48).

Barry et al. do not teach the composition further comprises an epoxy compound. However, Imai et al. also teach a polyurethane formulation in which bisphenol A

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diglycidyl ether is included (Column 5, Lines 38 - 51). Barry et al. and Imai et al. are analogous art as they are from the same field of endeavor, namely polyurethane compositions in which compounds for avoiding discoloration are employed. At the time of invention, it would have been obvious to a person of ordinary skill in the art to use bisphenol A diglycidyl ether in the composition taught by Barry et al. The motivation would have been that bisphenol A diglycidyl ether acts as a discoloration inhibitor in polyurethanes (Imai et al.: Column 5, Lines 38 - 51).

Claims 8 - 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,338,478 to Barry et al. in view of US 4,525,420 to Imai et al., as applied to Claim 1 above, as evidenced by US 5,106,883 to Horacek.

Regarding Claims 8 - 11. Barry et al. teach the composition of Claim 1 wherein the composition is added to a mixture for preparing a polyurethane foam. The mixture further comprises the fire retardant Thermolin 101 from Olin Corp. (Example 2). While Barry et al. do not expressly teach the composition of Thermolin 101, Horacek teach Thermolin 101 to be ethylene glycol bis(di-2-chloroethyl phosphate) (Column 3, Lines 11 - 12).

Furthermore, a composition is evaluated by what it is rather than what it does. Independent Claim 1 is related to a composition whereas Claims 8 - 11 provide limitations regarding a foam, which has not been claimed, into which the composition of Claim 1 can be incorporated. Accordingly, Claims 8 - 11 are not further limiting in as so far as the composition of Claim 1 is concerned.

Claims 14 – 20, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,338,478 to Barry et al. in view of US 4,525,420 to Imai et al.

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Regarding Claims 14 – 20, 25, and 26. Barry et al. teach a method for preventing scorching in polyurethane foams containing flame retardants through the use of a stabilizing composition (Column 1, Lines 51 - 61; Column 4, Line 64 - Column 5, Line 3). The composition may be added to the reaction mixture used to form the foam prior to foaming (Example 2). A mixture of two types of antioxidant agents, a diarylamine and a hindered phenol, is used in the composition (Column 1, Lines 51 - 61). The diarylamine used may also be a mixture of alkylated diphenylamines (Column 2, Lines 10 - 26). The stabilizer composition further comprises a pentaerythritol phosphite such as bis(2,4-di-*t*-butylphenyl)pentaerythritol diphosphite (Column 1, Lines 51 - 61; Column 2, Line 59 - Column 3, Line 9). The stabilizer composition may be added to a foamable reaction mixture which may further comprise stannous octoate, a metallic salt of carboxylic acid (Column 3, Lines 46 - 63 and Column 4, Lines 39 - 48).

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Barry et al. do not teach the composition used in their method further comprises an epoxy compound. However, Imai et al. also teach a polyurethane formulation in which bisphenol A diglycidyl ether is included (Column 5, Lines 38 - 51). At the time of invention, it would have been obvious to a person of ordinary skill in the art to use bisphenol A diglycidyl ether in the composition taught by Barry et al. The motivation would have been that bisphenol A diglycidyl ether acts as a discoloration inhibitor in polyurethanes (Imai et al.: Column 5, Lines 38 - 51).

Claims 21 - 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,338,478 to Barry et al. in view of US 4,525,420 to Imai et al., as applied to Claim 14 above, as evidenced by US 5,106,883 to Horacek.

Regarding Claims 21 - 24. Barry et al. teach the method of Claim 14 wherein the stabilizing composition is added to a mixture for preparing a polyurethane foam. The

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mixture further comprises the fire retardant Thermolin 101 from Olin Corp. (Example 2). While Barry et al. do not expressly teach the composition of Thermolin 101, Horacek teach Thermolin 101 to be ethylene glycol bis(di-2-chloroethyl phosphate) (Column 3, Lines 11 - 12).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 – 6, 9, 11, 12, 14- 19, 22, 24, and 25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1 - 20 of copending Application No. 11/628,999 in view of US 5,338,478 to Barry et al. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are obvious variations upon each other.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Regarding Claim 1. Instant Claim 1 corresponds to a combination of Claims 1 and 9 of Application No. 11/628,999. Though Application No. 11/628,999 does not teach an anti-scorch composition comprising a phosphite, this limitation is taught by Barry et al. (Column 1, Lines 51 – 61; Column 2, Line 59 – Column 3, Line 9). At the time of invention, it would have been obvious to a person of ordinary skill in the art to include a phosphite in the anti-scorch composition of Application No. 11/628,999. The motivation would have been that phosphites provide advantages such imparting increased color stability to polyether polyols and polyurethane foams (Barry et al.: Column 1, Line 52 – Column 2, Line 2).

Regarding Claims 2 – 6, 9, 11, and 12. Instant Claims 2, 3, 4, 5, 6, 9, 11, and 12 correspond to Claims 2, 3, 4, 5, 6, 8, and 10 of Application No. 11/628,999.

Regarding Claim 14. Instant Claim 14 corresponds to a combination of Claims 11 and 19. Though Application No. 11/628,999 does not teach an anti-scorch composition comprising a phosphite, this limitation is taught by Barry et al. (Column 1, Lines 51 – 61; Column 2, Line 59 – Column 3, Line 9). At the time of invention, it would

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have been obvious to a person of ordinary skill in the art to include a phosphite in the anti-scorch composition of Application No. 11/628,999. The motivation would have been that phosphites provide advantages such imparting increased color stability to polyether polyols and polyurethane foams (Barry et al.: Column 1, Line 52 – Column 2, Line 2).

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Regarding Claims 15 – 19, 22, 24, and 25. Instant Claims 15, 16, 17, 18, 19, 22, 24, and 25 correspond to Claims 12, 13, 14, 15, 16, 17, 18, and 20 of Application No. 11/628,999.

Claims 1 – 26 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 23 – 28, 30 – 38, 41-46, and 48 - 56 of copending Application No. 11/643,461. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are obvious variations upon each other.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Regarding Claim 1. Instant Claim 1 corresponds to a combination of Claims 23, 24, and 33 of Application No. 11/643,461.

Regarding Claims 2 – 13. Instant Claims 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, and 13 correspond respectively to Claims 30, 31, 25, 26, 27, 28, 35, 36, 37, 38, 32, and 34 of Application No. 11/643,461.

Regarding Claim 14. Instant Claim 14 corresponds to a combination of Claims 41, 42, and 51 of Application No. 11/643,461.

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Regarding Claims 15 - 26. Instant Claims 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, and 26 correspond respectively to Claims 48, 49, 43, 44, 45, 46, 53, 54, 55, 56, 50, and 52 of Application No. 11/643,461.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA WINKLER whose telephone number is (571)270-3305. The examiner can normally be reached on Monday - Friday 7:30AM - 5PM E.S.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571)272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo, Ph.D./ MW Supervisory Patent Examiner, Art Unit 1796 July 21, 2008 1-Aug-08